What is claimed is:

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1. A method for inducing or enhancing chondrogenesis in cells comprising the step of exposing said

cells to a matrix composition comprising of type I collagen and BMP-4.

CLAIMS

- 2. A method for inducing or enhancing chondrogenesis in cells comprising the step of exposing said cells to a matrix composition comprising of type II collagen and BMP-4.
- 3. A method for inducing or enhancing chondrogenesis in cells comprising the step of exposing said cells to a matrix composition comprising of type I collagen, hyaluronate and BMP-4.
- 4. A method for inducing or enhancing chondrogenesis in cells comprising the step of exposing said cells to a matrix composition comprising of type II collagen, hyaluronate and BMP-4.
- 5. A method according to any one of claims 1 to 4, 20 wherein said composition further comprises GDF-5.
 - 6. A method according to claim 1, 2, 3 or 4 wherein said step of exposing said cells occurs in vivo.
 - 7. A method according to claim 5 wherein said step of exposing said cells occurs in vivo.

A method according to claim 1, 2, 3 or 4 wherein said step of exposing said cells occurs in vitro. 9. A method according to claim 5 wherein said step of exposing said cells occurs in vitro. 5 A method according to claim 6 wherein said cells comprise joint tissue. A method according to claim 7 wherein said cells comprise joint tissues. 10 12. A composition comprising an extracellular matrix of type I collagen containing an effective amount of BMP-4 sufficient to induce or enhance chondrogenesis. 171 13. A composition comprising an extracellular matrix of type II collagen containing an effective amount of BMP-4 sufficient to induce or enhance chondrogenesis. : 120 A composition comprising an extracellular matrix of type I collagen and hyaluronate containing an effective amount of BMP-4 sufficient to induce or enhance chondrogenesis. A composition comprising an extracellular matrix of type II collagen and hyaluronate containing an 20 effective amount of BMP-4 sufficient to induce or enhance chondrogenesis. - 9 -

- 16. A composition comprising an extracellular matrix of type I collagen containing an effective amount of a combination of BMP-4 and GDF-5 sufficient to induce or enhance chondrogenesis.
- 5 17. A composition comprising an extracellular matrix of type II collagen containing an effective amount of BMP-4 and GDF-5 sufficient to induce or enhance chondrogenesis.
 - 18. A composition comprising an extracellular matrix of type I collagen and hyaluronate containing an effective amount of BMP-4 and GDF-5 sufficient to induce or enhance chondrogenesis.

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19. A composition comprising an extracellular matrix of type II collagen and hyaluronate containing an effective amount of BMP-4 and GDF-5 sufficient to induce or enhance chondrogenesis.